

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (CURRENTLY AMENDED) A production method for a solar battery module, comprising the steps of:

utilizing a production apparatus including a positioning belt and a heating belt located adjacent each other in a transferable manner and a press belt extending over the positioning belt and the heating belt in opposed relation to the positioning belt and the heating belt such that the press belt overlaps at least a portion of the positioning belt, and adapted to control the heating belt and the press belt at predetermined temperatures;

positioning a plurality of solar battery cells and interconnectors required for connection of the solar battery cells on an upstream portion of the positioning belt and transporting the solar battery cells and the interconnectors to a downstream portion of the positioning belt;

transferring the solar battery cells and the interconnectors transported to the downstream portion of the positioning belt onto the heating belt while holding the solar battery cells and the interconnectors between the positioning belt and the press belt; and

holding the solar battery cells and the interconnectors transferred onto the heating belt between the heating belt and the press belt and soldering the interconnectors to the solar battery cells while transporting the solar battery cells and the interconnectors.

2. (CURRENTLY AMENDED) A-The solar battery module production method as set forth in claim 1, wherein at least a surface of the positioning belt is composed of a resin.

3. (CURRENTLY AMENDED) A-The solar battery module production apparatus to be used for a solar battery module production method as recited in claim 1, the production apparatus comprising:

a positioning belt and a heating belt located adjacent each other in a transferable manner; and

a press belt extending over the positioning belt and the heating belt in opposed relation to the positioning belt and the heating belt, and

wherein the heating belt and the press belt are each controlled at a predetermined temperature, and

wherein the press belt overlaps at least a portion of the positioning belt.

4. (CURRENTLY AMENDED) A-The solar battery module production apparatus as set forth in claim 3, wherein at least a surface of the positioning belt is composed of a resin.

5. (CURRENTLY AMENDED) A-The production method for a solar battery module, comprising the steps of:

utilizing a production apparatus including a heating belt and a press belt disposed in opposed relation and a-at least one upper resilient member which

biases the heating belt towards the press belt and at least one lower resilient member which biases the press belt toward each other the heating belt, and adapted to control the heating belt and the press belt at predetermined temperatures;

holding a plurality of solar battery cells and interconnectors required for connection of the solar battery cells between the heating belt and the press belt in a properly positioned state; and

soldering the interconnectors to the solar battery cells while transporting the solar battery cells and the interconnectors.

6. (CURRENTLY AMENDED) AThe solar battery production method as set forth in claim 5, wherein one or both the at least one upper and at least one lower resilient member members are is a leaf spring springs.

7. (CURRENTLY AMENDED) AThe solar battery module production apparatus to be used for a solar battery module production method as recited in claim 5, the production apparatus comprising:

a heating belt and a press belt disposed in opposed relation; and
a-at least one upper resilient member which biases the heating belt and towards the press belt toward each other; and
at least one lower resilient member which biases the press belt towards the heating belt,

wherein the heating belt and the press belt are each controlled at a predetermined temperature.

8. (CURRENTLY AMENDED) A-The solar battery module production apparatus as set forth in claim 7, wherein one or both the at least one upper and at least one lower resilient member members are is a leaf spring springs.

9. (NEW) The solar battery production method as set forth in claim 5, wherein a number of upper resilient members is less than a number of lower resilient members.

10. (NEW) The solar battery module production apparatus as set forth in claim 7, wherein a number of upper resilient members is less than a number of lower resilient members.

11. (NEW) The solar battery module production apparatus as set forth in claim 3, further comprising:

an upper heating block disposed on a back side of the heating belt and a lower heating block disposed on a back side of the pressing belt, the upper and lower heating blocks adapted to heat solar cells of the solar battery module; and

an upper cooling block disposed on the back side of the heating belt and a lower cooling block disposed on a back side of the pressing belt, the upper

and lower cooling blocks adapted to cool the solar cells of the solar battery module.

12. (NEW) The solar battery module production apparatus as set forth in claim 7, further comprising:

an upper heating block disposed on a back side of the heating belt and a lower heating block disposed on a back side of the pressing belt, the upper and lower heating blocks adapted to heat solar cells of the solar battery module; and

an upper cooling block disposed on the back side of the heating belt and a lower cooling block disposed on a back side of the pressing belt, the upper and lower cooling blocks adapted to cool the solar cells of the solar battery module.

13. (NEW) A solar battery module production apparatus, comprising:

a heating belt and a press belt disposed in opposed relation arranged to transfer solar cells of the solar battery module therebetween;

an upper heating block disposed on a back of a side of the heating belt facing the solar cells and arranged to heat the solar cells;

a lower heating block disposed on a back of a side of the press belt facing the solar cells and arranged to heat the solar cells;

an upper cooling block disposed on the back of the side of the heating belt facing the solar cells and arranged to cool the solar cells;

a lower cooling block disposed on the back of the side of the press belt facing the solar cells and arranged to cool the solar cells.

14. (NEW) The solar battery module production apparatus as set forth in claim 13, wherein the upper and lower cooling blocks are on a down stream side of the upper and lower heating blocks as measured relative to a direction of transfer of the solar cells.

15. (NEW) The solar battery module production apparatus as set forth in claim 13, wherein heat supplied by the upper and lower heating blocks is sufficient to melt solder present on the solar cells.

16. (NEW) The solar battery module production apparatus as set forth in claim 15, wherein cooling supplied by the upper and lower cooling blocks is sufficient to cool the solder to a solid state.

17. (NEW) The solar battery module production apparatus as set forth in claim 13, wherein the upper and lower heating blocks are arranged to heat entire surfaces of the solar cells.

18. (NEW) The solar battery module production apparatus as set forth in claim 13, further comprising:

a shroud surrounding the upper and lower heating blocks and the upper and lower cooling blocks.

19. (NEW) The solar battery module production apparatus as set forth in claim 18, wherein an inside of the shroud is kept in a nitrogen atmosphere.

20. (NEW) The solar battery module production apparatus as set forth in claim 13, further comprising:

a positioning belt positioned adjacent to the heating belt along a transfer direction of the solar cells, wherein the pressing belt overlaps at least a portion of the positioning belt.

21. (NEW) The solar battery module production apparatus as set forth in claim 20, wherein a diameter of a pulley of the positioning belt disposed adjacent to the heating belt is less than a diameter of a pulley of the heating belt disposed adjacent to the positioning belt.

22. (NEW) The solar battery module production apparatus as set forth in claim 20, wherein the positioning belt is formed of a polyurethane resin impregnated with nylon filaments.

23. (NEW) The solar battery module production apparatus as set forth in claim 20,

wherein there are a plurality of positioning belts, a plurality of heating belts, and a plurality of press belts.

24. (NEW) The solar battery module production apparatus as set forth in claim 23,

wherein a number of positioning belts, a number of heating belts, and a number of press belts are all equal, and

wherein the number of each belts is determined based on a number of connection leads for each solar cell.